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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/488,398	01/20/2000	Bernhard Lucas	1047	4407

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EXAMINER	
LEE, BENNY T	

ART UNIT	PAPER NUMBER
2817	

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/488,398	LUCAS ET AL.	
	Examiner	Art Unit	
	Benny Lee	2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10,13-15,17; 18-23* is/are rejected.

7)☒ Claim(s) *11,12 and 16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 November 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The drawings are objected to because of the following: In figs. 1, 2, 3, 4 and 5, note that reference label --9'-- needs to be provided as to be commensurate with the specification description of these drawing figures; In fig. 2, note that a reference label --8-- should be provided as to be consistent with the description at page 7, lines 8-11 of the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claims 18-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 18, note that it is unclear whether the limitations recited in the last paragraph of the claim finds support in the original disclosure. Note that it appears that claim 18 is intended to read on the embodiment of fig. 5. If such is the case, then the original description regarding fig. 5 only discloses the limitation of the penultimate paragraph [i.e. first contact area (9) is fixed to conductor (7) while second contact area (9') is fixed to waveguide (1)]. There is no apparent disclosure for the opposite arrangement (i.e. the limitations recited in the last paragraph of claim 18) with respect to the fig. 5 embodiment, and as such this feature has been treated as "new matter".

However, if applicants' do not believe such a limitation is "new matter", then an appropriate explanation is required, including pointing out where explicit and/or implicit disclosure for the limitation in question can be found in the original disclosure.

Claim 17 is are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 17, note that it is unclear if the "coupling opening" can be properly characterized as being "parallel to the conductor strip", especially in light of the depiction in fig. 3. Clarification is needed..

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 10, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese ('002) reference taken in combination with Maillet et al (both of record).

Maillet et al (fig. 3) discloses that a waveguide transformer or ridge (31) can be connected to a microstrip conductor (44) located "outside" of the waveguide chamber (10) and further includes a link (32) passing through a wall or partition of the waveguide (10) and contacting surfaces on the ridge (12) and the conductor (14). However, the link is not a spring element of the type claimed.

The Japanese ('002) reference pertains to a convertor between a microstrip conductor (5) on a strip substrate (6) and a waveguide (1) with a stepping transformer (3b). The convertor is effected through a leaf or "coiled" spring (4) of elastic material which is fixed or bonded (e.g. adhesively) at a contact area to transformer (3b) at one end thereof while the other end of the spring (4) is in parallel to the one end and is slidably pressed into contact with the microstrip conductor (5) at a contact area thereof. Note that by virtue of the sliding contact, stable characteristics can be maintained despite relative movement of the waveguide and microstrip

conductor due to heat or external forces. Note that the elastic nature of the spring (4) inherently imparts a "sliding contact".

Accordingly, it would have been obvious to have substituted the leaf or coiled spring taught in the Japanese ('002) reference in place of the conductive link in fig. 3 of Maillet et al. Such a modification would have been considered an obvious substitution of art recognized equivalent linking structures, especially since both reference pertain to the same field of endeavor (i.e. linking a planar convertor circuit with a ridge of a waveguide) and as such, would have suggested the obviousness of the combination.

Moreover, note that the respective method recited in claim 13 is not given patentable weight as they pertain to how the final claimed apparatus was obtained.

Applicant's arguments filed 27 October 2005 have been fully considered but they are not persuasive.

Applicants' have argued that the prior art of record now fail to meet the claims as presented in that the prior art references fail to show: a coil spring; the conductor strip being outside the waveguide; and the lack of an electrically conductive adhesive for bonding with the spring.

In response, the examiner respectfully disagrees as follows: It should be noted that applicants' have fail to establish distinguishing criticality between a "coil spring" and the "leaf spring" disclosed by the Japanese ('002) reference. Although applicants' may be their own lexicographer, the terminology used should establish a distinction in terms of structure and function of the inventive feature as compared to corresponding features in the prior art. In the present case, applicants' have failed to provide any distinguishing attributes regarding the

claimed "coiled spring" over the prior art "leaf spring". As far as the examiner can ascertain, each is a flexible conductive spring, whose flexibility allows it to slide along a conductive surface. Regards the strip circuit being "outside" the waveguide, it should be noted that in the above combination, the Maillet et al reference clearly discloses a strip circuit, which is located outside of the waveguide (10). Regards the lack of a conductive adhesive in the prior art, it should be noted that applicants' suggests that soldering is one possible forming of attaching with the leaf spring, in which solder can be broadly construed as a conductive adhesive. Accordingly, irrespective of the type of bonding (e.g. soldering, welding, etc), a conductive adhesive must necessarily have been used to maintain the electrical continuity of the bond between the leaf spring and the connected conductive element.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number 571 272 1764.

B. Lee

Benny Lee

BENNY T. LEE
PRIMARY EXAMINER
ART UNIT 2817